

Current practices and perceived barriers to tobacco-treatment delivery among healthcare professionals from 15 European countries. The EPACTT Plus project

Charis Girvalaki^{1,2}, Enkeleint A. Mechili^{2,3}, Sophia Papadakis^{1,2,4,5}, Katerina Nikitara¹, Andrey Demin⁶, Antigona Trofor^{7,8}, Arben Lila⁹, Arusyak Harutyunyan¹⁰, Aurela Saliaj³, Deska Dimitrievska¹¹, Francisco Rodriguez Lozano^{1,12}, George Bakh-turidze¹³, Javier Ayesta¹⁴, Krzysztof Przewozniak^{15,16}, Maria Sofia Cattaruzza^{17,18}, Marija Zdraveska¹¹, Mihaela Lovše¹⁹, Biljana Kilibarda²⁰, Otto Stoyka²¹, Panagiotis Behrakis^{22,23}, Pierre Bize²⁴, Polina Starchenko¹, Shkumbin Spahija⁹, Cornel Radu-Loghin¹, Constantine I. Vardavas^{1,25}

ABSTRACT

INTRODUCTION The latest evidence-based Guidelines for Treating Tobacco Dependence highlight the significant role of healthcare professionals in supporting smokers interested to quit. This study aimed to identify the current practices of healthcare professionals in Europe and perceived barriers in delivering tobacco treatment to their patients who smoke.

METHODS In the context of EPACTT-Plus, collaborating institutions from 15 countries (Albania, Armenia, Belgium, Italy, France, Georgia, Greece, Kosovo, Romania, North Macedonia, Russia, Serbia, Slovenia, Spain, Ukraine) worked for the development of an accredited eLearning course on Tobacco Treatment Delivery available at <http://elearning-ensp.eu/>. In total, 444 healthcare professionals from the wider European region successfully completed the course from December 2018 to July 2019. Cross-sectional data were collected online on healthcare professionals' current practices and perceived barriers in introducing tobacco-dependence treatment into their daily clinical life.

RESULTS At registration, 41.2% of the participants reported having asked their patients if they smoked. Advise to quit smoking was offered by 47.1% of the participants, while 29.5% reported offering assistance to their patients who smoked in order to quit. From the total number of participants, 39.9% regarded the lack of patient compliance as a significant barrier. Other key barriers were lack of: interest from the patients (37.4%), healthcare professionals training (33.1%), community resources to refer patients (31.5%), and adequate time during their everyday clinical life (29.7%).

CONCLUSIONS The identification of current practices and significant barriers is important to build evidence-based guidelines and training programs (online and/or live) that will improve the performance of healthcare professionals in offering tobacco-dependence treatment for their patients who smoke.

AFFILIATION

- 1 European Network for Smoking and Tobacco Prevention, Brussels, Belgium
- 2 Clinic of Social and Family Medicine, Medical School, University of Crete, Heraklion, Greece
- 3 Department of Healthcare, Faculty of Health, University of Vlora, Vlora, Albania
- 4 Division of Prevention and Rehabilitation, University of Ottawa Heart Institute, Ottawa, Canada
- 5 Faculty of Medicine, University of Ottawa, Ottawa, Canada
- 6 Institute of Leadership and Healthcare Management, I.M. Sechenov First Moscow State Medical University, Moscow, Russia
- 7 University of Medicine and Pharmacy 'Grigore T.Popa', Iasi, Romania
- 8 AER PUR Romania, Bucharest, Romania
- 9 Kosovo Advocacy and Development Center, Prishtina, Kosovo
- 10 Turpanjian School of Public Health, American University of Armenia, Yerevan, Armenia
- 11 Respiratory Society of North Macedonia, Skopje, North Macedonia
- 12 Comité Nacional de Prevención del Tabaquismo, Madrid, Spain
- 13 Tobacco Control Alliance of Georgia, Tbilisi, Georgia
- 14 University of Cantabria, Cantabria, Spain
- 15 Foundation 'Smart Health – Health in 3D', Warsaw, Poland
- 16 Maria Skłodowska-Curie National Research Institute of Oncology, Warsaw, Poland
- 17 Department of Public Health & Infectious Diseases, Sapienza University, Rome, Italy
- 18 SITAB, Società Italiana di Tabaccologia, Rome, Italy
- 19 Slovenian Coalition for Tobacco Control, Ljubljana, Slovenia
- 20 Institute of Public Health of Serbia, Belgrade, Serbia
- 21 Kyiv Health Center, Kyiv, Ukraine
- 22 George D. Behrakis Research Laboratory, Athens, Greece
- 23 Hellenic Cancer Society, Athens, Greece
- 24 Wallonie Tabac Prevention, Brussels, Belgium
- 25 Medical School, University of Crete, Heraklion, Greece

CORRESPONDENCE TO

Charis Girvalaki. European Network for Smoking and Tobacco Prevention, Brussels, Belgium. E-mail: charis@tobcontrol.eu ORCID ID <http://orcid.org/0000-0001-6849-0972>

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INTRODUCTION

Smoking cessation is one of the main strategies suggested by the World Health Organization's (WHO) MPOWER package against the tobacco epidemic through Guidelines that call parties to facilitate accessibility and affordability for treatment of tobacco dependence¹.

Through the latest evidence-based Guidelines for Treating Tobacco Dependence, the European Network for Smoking and Tobacco Prevention (ENSP) highlighted the importance of healthcare professionals' role in supporting smokers interested in receiving tobacco treatment by organizing a treatment plan, combining behavioral counseling and pharmacotherapy, while non-pharmacological therapy should remain an option when it is best preferred by the patients^{2,3}. The 5As model is considered an evidence-based intervention for integrating tobacco-dependence treatment into clinical settings and has been shown to increase quit attempts and cessation rates. It consists of the following fundamental strategies: Ask all patients if they smoke, Advise patients who smoke to quit, Assess readiness to quit, Assist patients to make a quit attempt, and Arrange follow-up meetings^{2,4}.

Live training interventions have been found to increase the rate of 5As delivery⁵⁻⁷. However, recent reviews show that there is a gap in the use of advanced computer-based medical education approaches on tobacco-treatment training for healthcare professionals⁸.

Various factors influence healthcare professionals' performance in offering smoking cessation support, such as time restrictions, lack of training,

reimbursement, knowledge and skills⁹, experience, and task perception^{10,11}. Among others, the existing scientific work has identified additional barriers, such as the competing demands, the lack of familiarity with effective treatments, and perceptions of low receptivity to tobacco interventions^{12,13}.

Based on the above, this study aimed to identify the current practices of healthcare professionals in Europe and perceived barriers in delivering tobacco treatment to their patients who smoke, important factors that will help us build evidence-based guidelines and training programs (online and/or live) to improve the performance of healthcare professionals in offering tobacco-dependence treatment for their patients who smoke.

METHODS

In the context of EPACTT-Plus (European Network for Smoking Prevention's Accredited Curriculum on Tobacco Treatment-Plus), collaborating institutions from 15 (Albania, Armenia, Belgium, Italy, France, Georgia, Greece, Kosovo, Romania, North Macedonia, Russia, Serbia, Slovenia, Spain, Ukraine) countries worked for the development of an accredited by the European Accreditation Council for Continuing Medical Education (2 CME) eLearning course on Tobacco Treatment Delivery available at <http://elearning-ensp.eu/>. In total, 444 healthcare professionals from the wider European region successfully completed the course from December 2018 to July 2019.

Cross-sectional data on healthcare professionals' current practices and perceived barriers in introducing tobacco-dependence treatment into

their daily clinical life were collected online, after consent, at the beginning of the course.

Current practices of healthcare professionals in delivering each of the 4As (ask, advise, assist, arrange) were assessed by the participant responses: 'Never', 'Few times', 'Half times', 'Many times', and 'Always'; specifically, when asked how frequently during the past month they ask their patients about their smoking status (Ask) and documented tobacco use in the patient's medical record; advised them to quit smoking (Advise); provided assistance with quitting (Assist); or arranged follow-up support (Arrange). For Assist, we examined whether the healthcare professional provided brief smoking cessation counselling (3–5 minutes), worked with the patient to set a date to quit smoking, gave written materials about quitting smoking, and discussed or prescribed available quit-smoking medications.

Barriers that might limit the capacity of the healthcare professionals to offer smoking cessation treatments were assessed by the participant responses: 'Not at all important', 'Less important', 'Neutral', and 'Important', by rating a list of 10 statements. The statements were: 'patients not interested', 'patients do not comply', 'lack of impact on patients', 'lack of time', 'lack of/insufficient reimbursement', 'lack of patient education material', 'lack of training', 'lack of community resources to refer patients', 'complexity of smoking cessation

guidelines', and 'other health problems take priority'.

Statistical analysis

Frequencies and percentages are used to describe healthcare professionals' current practices and perceived barriers in delivering tobacco treatment to their patients who smoke. Data were analysed with the IBM SPSS statistical software 23.0.

RESULTS

Among the participants, 73.4% were female with almost half (43.6%) aged <30 years. The majority worked in public sector units (73.9%) in urban areas (81.9%), and on a full-time basis (82.0%). Also, 68.9% had not previously participated in smoking-cessation training and were non-smokers (67.8%). With regard to the existence of smoking cessation aids in their clinics, 56.5% reported having available a process to screen and document the smoking status of patients while 28.0% had self-help materials for smokers and 15.4% consult forms to guide them through tobacco-treatment interventions.

Table 1 presents the current practices of healthcare professionals in terms of the 4As delivery. Before the course, 41.2% of the participants reported investigating their patients smoking status while 31.8% documented the smoking status of their patients. In addition to the above, advise to quit smoking was offered by 47.1% of the participants.

Table 1. Assessment and frequency of current practices in delivering tobacco treatment to their patients who smoke, among participants of the EPACTT eLearning programme, as collected at registration, 2018–2019 (N=444)

Current practices	Delivery of 4As				
	Never n (%)	Few times n (%)	Half times n (%)	Many times n (%)	Always n (%)
Ask	71 (16.0)	40 (9.0)	81 (18.2)	69 (15.5)	183 (41.2)
Document smoking status of the patient	142 (32.0)	43 (9.7)	66 (14.9)	52 (11.7)	141 (31.8)
Advise – Quit smoking	58 (13.1)	36 (8.1)	63 (14.2)	78 (17.6)	209 (47.1)
Assist – Brief counseling (3–5 minutes)	80 (18.0)	75 (16.9)	78 (17.6)	80 (18.0)	131 (29.5)
Assist – Set quit date	144 (32.4)	68 (15.3)	92 (20.7)	66 (14.9)	74 (16.7)
Assist – Provide self-help materials	161 (36.3)	55 (12.4)	99 (22.3)	48 (10.8)	81 (18.2)
Assist – Discuss medications ^a	127 (30.8)	68 (16.5)	91 (22.1)	54 (13.1)	72 (17.5)
Assist – Prescribe medications	235 (52.9)	60 (13.5)	70 (15.8)	34 (7.7)	45 (10.1)
Arrange	174 (39.2)	77 (17.3)	78 (17.6)	49 (11.0)	66 (14.9)

^a Missing values = 32.

Table 2. Assessment and frequency of perceived barriers in delivering tobacco treatment to their patients who smoke, among participants of the EPACTT eLearning programme, as collected at registration, 2018–2019 (N=444)

Perceived barriers	Not at all important n (%)	Less important n (%)	Neutral n (%)	Important n (%)
Patients not interested	23 (5.2)	61 (13.7)	194 (37.4)	166 (37.4)
Patients do not comply	25 (5.6)	68 (15.3)	174 (39.2)	177 (39.9)
Lack of impact on patients	30 (6.8)	81 (18.2)	224 (50.5)	109 (24.5)
Lack of time	47 (10.6)	108 (24.3)	157 (35.4)	132 (29.7)
Lack of/insufficient reimbursement	79 (17.8)	119 (26.8)	133 (30.0)	113 (25.5)
Lack of patient education material	27 (6.1)	108 (24.3)	186 (41.9)	123 (27.7)
Lack of training	34 (7.7)	79 (17.8)	184 (41.4)	147 (33.1)
Lack of community resources to refer patients	33 (7.4)	84 (18.9)	187 (42.1)	140 (31.5)
Complexity of smoking cessation guidelines	62 (14.0)	139 (31.3)	157 (35.4)	86 (19.4)
Other health problems take priority	59 (13.3)	105 (23.6)	165 (37.2)	115 (25.9)

Almost one in three (29.5%) offered assistance to their patients to quit smoking by providing brief counselling (3–5 minutes), 16.7% helped them to set a quit date, 18.2% provided self-help materials, 17.5% discussed medication, 10.1% prescribed medication to patients who were willing to quit while 14.9% of the healthcare professionals arranged follow-up meetings.

In Table 2 the perceived barriers to implementing tobacco-treatment interventions, are presented. Of the participants, 39.9% regarded the lack of compliance by the patients as a significant barrier. Other important barriers were the lack of interest from the patients (37.4%), healthcare professionals training (33.1%), community resources to refer patients (31.5%), and adequate time during their everyday clinical life (29.7%) .

DISCUSSION

The results of our study reveal that at registration, participants of the EPACTT eLearning reported insufficient rates of 4As delivery, especially in providing assistance and arranging follow-up meetings with their patients. In addition, patient-related factors such as lack of interest as well as lack of healthcare professionals training and lack of adequate time in everyday clinical life were reported as the most important factors preventing the implementation of tobacco-treatment interventions with patients who smoked. Several

previous studies also show that rates of tobacco-treatment delivery remain sub-optimal in Europe^{14,15}. This evidence along with the fact that the tobacco-use prevalence in Europe has remained stable for the past years¹⁶ reinforce the importance of joint actions for the implementation of WHO FCTC Article 14.

Previous training interventions have been found to increase the rate of 5As delivery⁵⁻⁷. A cluster randomised controlled trial also found that a 1-hour practice-tailored training significantly increased the frequency at which ‘ask’ and ‘advise’ were delivered¹⁷. Additionally, online education using new technologies has been found to potentially increase educational opportunities, supplement teaching and decrease distance barriers in health professional education¹⁸. However, more studies evaluating the efficacy of online training programs are necessary.

The importance of identifying and addressing the perceived barriers in order to increase the delivery of tobacco-treatment interventions from healthcare professionals has been highlighted in previous studies^{9,19,20} while a recent study found that healthcare professionals that had positive experiences from delivering tobacco-treatment interventions, and who felt competent, were positively associated with performing the 5As and having organizational support with Assist and Arrange. However, personal tobacco use was also negatively associated with Advice and Arrange²¹.

Our results show that time constraints and insufficient training on how to treat tobacco dependence were among the most important barriers. Other studies confirm these results⁹⁻¹¹. In addition, low receptivity of tobacco interventions from the patients is highlighted as a barrier from other studies^{12,13}.

The importance of continuing medical education training programmes has also been acknowledged and affects professional competence, future clinical practice, and patient outcomes^{22,23}. We propose that translating evidence-based behavioural-change interventions into practice must be aided by evidence-based guidelines², educational curricula, training courses, policy recommendations, and implementation strategies for Europe²⁴.

Strengths and limitations

There are a limited number of studies reporting data from an eLearning platform. Our study presented results on current practices and barriers of tobacco-treatment delivery from healthcare professionals of the wider European region, as reported through the ENSP eLearning platform. This study collected data from healthcare professionals during their first registration in the online programme, and hence the results may not be generalizable to the population of healthcare professionals in Europe. Healthcare professionals who participated in the eLearning program might have been more motivated or interested in tobacco, and hence more likely to ask and support their patients. On the other hand, participants might have been lacking in skills, which may be the reason why they registered in the course. Moreover, by design, our study was not able to evaluate the effectiveness of the course in changing their current practices with regard to implementing the 4As, for which a follow-up would provide valuable insight. We note that we did not enquire about 'Assess' in the present study to shorten the total length of the survey, as it was considered less important than the other 4As in terms of the desired outcomes of the intervention. Finally, giving four options for rating the barriers' significance may have confused the participants' responses.

CONCLUSIONS

The identification of current practices and significant barriers is important to improve the existing

evidence-based guidelines and training programs (online and/or live) that affect the performance of healthcare professionals in offering tobacco-dependence treatment to their patients who smoke. The present study has highlighted the actions, at the European level, that are necessary to reinforce the implementation of WHO FCTC Article 14 synergically with the other of the Articles.

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CONFLICTS OF INTEREST

The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none was reported.

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